

**CLAIMS**

1. A method of communicating defect information between a defect source identifier client and server comprising:

creating defect inspection information within a defect source identifier client, the defect inspection information containing information regarding identified defects on semiconductor wafers;

converting the defect inspection information into converted defect inspection information that is in a form defined by user defined tags;

transmitting the converted defect inspection information through a network to a defect source identifier server; and

deriving defect source information at the defect source identifier server in response to the converted defect inspection information.

2. The method of claim 1, wherein the converted defect inspection information is in the form of extensible markup language (XML).

3. The method of claim 1, wherein the defect source information is in the form of XML.

4. The method of claim 1, wherein the defects on the semiconductor wafer are identified in a metrology cell in a wafer processing system.

5. The method of claim 1, further comprising:

transmitting the defect source information from the defect source identifier server to the defect source identifier client; and

utilizing the defect source information at the defect source identifier client.

6. The method of claim 5, wherein the defect source information and the defect inspection information are displayed simultaneously at the defect source identifier client.

7. The method of claim 5, further comprising:
  - providing defect reference information at the defect source identifier server;
  - transmitting the defect reference information from the defect source identifier server to the defect source identifier client; and
  - displaying the defect reference information at the defect source identifier client.
8. The method of claim 5, wherein the transmission of the defect reference information from the defect source identifier server to the defect source identifier client is controlled by user input at the defect source identifier client.
9. The method of claim 5, wherein the defect source information and the defect reference information are displayed simultaneously at the defect source identifier client.
10. The method of claim 1, wherein the utilizing the defect solution information involves displaying defect solutions to the defect at the defect source identifier client in response to the defect solution information.
11. A method of communicating defect information between a defect source identifier server and client comprising:
  - creating defect inspection information within a defect source identifier client, the defect inspection information containing information regarding identified defects on semiconductor wafers;
  - converting the defect inspection information into converted defect inspection information, wherein the converted defect inspection information is in the form of extensible markup language (XML);
  - transmitting the converted defect inspection information through a network to a defect source identifier server;
  - deriving defect reference information at the defect source identifier server in response to the converted defect inspection information, wherein the defect reference information is in the form of XML;

transmitting the defect reference information from the defect source identifier server to the defect source identifier client; and  
utilizing the defect reference information at the defect source identifier client.

12. The method of claim 11, wherein the defect reference information includes solutions.

13. The method of claim 11, wherein the defects on the semiconductor wafer are identified in a metrology cell in a wafer processing system.

14. The method of claim 11, wherein the defect reference information and the defect inspection information are displayed simultaneously at the defect source identifier client.

15. The method of claim 11, further comprising:  
displaying the defect reference information at the defect source identifier client.

16. The method of claim 11 wherein the transmission of the defect reference information from the defect source identifier server to the defect source identifier client is controlled by user input at the defect source identifier client.

17. The method of claim 11, wherein the defect source information and the defect reference information are displayed simultaneously at the defect source identifier client.

18. The method of claim 11, wherein the utilizing the defect solution information involves displaying defect solutions to the defect at the defect source identifier client in response to the defect reference information.

19. An apparatus for communicating defect information between defect source identifier server and clients comprising:
- a metrology tool creating defect inspection information, the defect inspection information containing information regarding identified defects on semiconductor wafers;
  - a converter converting the defect inspection information into converted defect inspection information that is in a form defined by user defined tags;
  - a network that transmitting converted defect inspection information to a defect source identifier server; and
  - the defect source identifier server deriving defect source information in response to the converted defect inspection information.
20. The apparatus of claim 19, wherein the converter is an extensible markup language (XML) converter.
21. The apparatus of claim 19, wherein the defect source information is in the form of XML.
22. The apparatus of claim 19, further comprising:
- the network transmitting the defect source information from the defect source identifier server to the defect source identifier client; and
  - the defect source identifier client utilizing the defect source information.
23. The apparatus of claim 22, wherein the defect source identifier client simultaneously displays defect source information and the defect inspection information.
24. The apparatus of claim 19, further comprising:
- the defect source identifier server providing defect reference information;
  - the network transmitting the defect reference information from the defect source identifier server to the defect source identifier client; and
  - the defect source identifier client displaying the defect reference information.

25. The apparatus of claim 24, wherein the network transmitting the defect reference information from the defect source identifier server to the defect source identifier client is controlled by user input at the defect source identifier client.

26. The apparatus of claim 24, wherein the defect source identifier client simultaneously displays the defect source information and the defect reference information.

27. The apparatus of claim 19, wherein the defect source identifier client utilizing the defect solution information involves displaying defect solutions.